

Partnerships: the Key to NBII Progress at PBIN

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Since its founding, the success of the National Biological Information Infrastructure (NBII) <www.nbii.gov> has been rooted in the cooperation and collaboration embodied in the Program's slogan, "Building Knowledge Through Partnerships."

The NBII – a Web-based system – links diverse, high-quality biological databases, information products, and analytical tools maintained by NBII partners in government agencies, academic institutions, non-government organizations, and private industry.

Resource managers, scientists, educators, and the general public use the NBII to answer a wide range of

questions related to the management, use, or conservation of this nation's biological resources.

Implementation of the NBII is being accomplished through the development of nodes that serve as interconnected entry points to the NBII and the information held by partners. One such node – the NBII Pacific Basin Information Node (PBIN) – is based on the Hawaiian

island of Maui and serves as one of the best examples of how knowledge can be developed and disseminated through constructive partnering.

The stakes in this venture couldn't be higher. Hawaii and other islands in the Pacific are losing their tropical heritage. In Hawaii, currently 75 percent of the known bird species are either extinct (23) or endangered (30). Of nearly 1,300 plant species native to Hawaii, 104 have gone extinct and 277 are endangered. More than 300 insect species are being considered for listing as endangered, many of which are important to native plant fertility.

PBIN partners confronting these and other challenges come from all sectors of the conservation community, including private institutions, like the B.P. Bishop Museum; state organizations, such as the Hawai'i Natural Heritage Program; and federal institutions, like the U.S. Geological Survey (USGS). The Bishop Museum brings 100 years of Pacific Basin species data and information to PBIN but also uses PBIN to integrate their taxonomic information with the data and tools contributed by other partners, such as the geospatial data

and mapping capabilities of the Hawai'i Natural Heritage Program. This kind of integration is the first step towards the predictive modeling applications that PBIN is working toward.

In addition to the USGS, which coordinates the NBII and has a biological science center headquartered in Hawaii, the Pacific Island Ecosystems Research Center (PIERC), other federal PBIN partners include the National Park Service (NPS) and the U.S. Fish and Wildlife Service (USFWS).

The NPS has 11 park units that stretch from Hawaii to American Samoa, Guam, and Saipan, including a National Trail. That vast area includes ecosystems stretching across ahupua'a (traditional land units) from sea level to more than 14,000 feet. Currently, the NPS manages more than 250,000 acres of terrestrial and marine areas in the Pacific.

The USFWS also extends throughout the Pacific. The USFWS has 19 National Wildlife Refuges with over 2 million acres of land in some remote locations that include Hawaii and American Samoa. USFWS responsibilities include the listing, management, and recovery of 328 threatened or endangered species.

What is gained by partnering through PBIN? "We're both customers and partners," says Melia Lane-Kamahele, Cartographer/GIS Coordinator with the NPS at the agency's Pacific Islands Support Office. "We want to be able to institutionalize our collaborative efforts and to integrate research, management, and outreach. PBIN is a great way to accomplish that. It's the next logical step from the ad hoc partnerships and working groups that were so common in the past."

The NPS will offer information to PBIN and seek PBIN data and information on such topics as taxonomy and invasive species. This information will help the NPS to model invasive species distributions, for instance and, in so doing, improve management decision-making.

"We (NPS) are committed to working through PBIN with the USFWS and other partners to leverage resources and achieve economies of scale in natural resource management," she says. "In a word, it's best expressed as 'synergy.' Collectively we can do much more than we can do separately. This way, no single organization has to support these enormous efforts by itself."

"It's best when we think in terms of group goals and not the goals of individual group members," says Ron Salz, GIS Program Leader with the USFWS, based in Honolulu, HI.

"In the same way as the Park Service, we will seek PBIN assistance in such areas as data sharing, standards, and collection protocols to make sure that when we go into the field and collect data, it's in a format we can contribute later without having to switch the data around to make it work," adds Salz.

The USFWS has more than 200 employees throughout the Pacific. As one of the key agencies responsible for the administration of the Endangered Species Act, its PBIN offerings include information on endangered species, such as listing decisions and recovery plans for the conservation community.

The USFWS reason for participating highlights another dimension of the partnership: "By partnering, we're enhancing the trust we've all developed over the years," Salz says. "We've worked with the NPS and many others for quite a long time, and trust is a key ingredient in making this partnership work."

As PBIN moves forward, it seems well-positioned to attain its goal of providing one-stop shopping on such common issues as invasive species and taxonomic authority, data standards and protocols, cross-

boundary/agency coordination, and the development of new technologies.

Lane-Kamahele sums it all up this way: "The bottom line is 'sandbox rules.' If you don't share, you aren't a partner. If you do share, everybody wins. In some ways, this is really simple stuff."

For More Information

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